

RDCP Peer Groups

Every covered position is identified with one of the following groups. Each group applies the classification guide/standard identified:

Peer Group Name	Definition	Guide Used
Acoustics and Aerodynamics (ACA) Lead Competency - AAAC	Conduct research and develop, assess, and apply either 1) acoustic technologies in the development of advanced aerospace systems to meet environmental acoustic requirements or 2) aerodynamic, flow physics and control, and/or component integration technologies to enable development of advanced aerospace vehicles.	RGEG and EDGE Part 3
Aerospace Systems Analysis (ASA) Lead Competency - ASCAC	Conduct systems analysis of aerospace vehicles and system concepts to meet desired mission capabilities (including performance, cost, and risk/safety), to define technology requirements of advanced concepts/systems to meet future mission needs, and to assess the benefits/payoffs of advanced technologies on current/future aerospace systems.	RGEG and EDGE Part 3
Aerothermodynamics and Hypersonic Air-breathing Propulsion (AHP) Lead Competency - AAAC	Conduct research and develop, assess, and apply aerothermodynamic and/or hypersonic air-breathing propulsion technology to enable development of hypersonic aircraft, launch vehicles, and planetary earth entry systems.	RGEG and EDGE Part 3
Atmospheric and Space Science (ATS) Lead Competency – AtSC	Conduct atmospheric and space science research to improve scientific understanding of the Earth's atmosphere-climate system and space environment.	RGEG and EDGE Part 3

Computational Methods (CME) Lead Competency - ASCAC	Conception, development, validation, and integration and application of advanced computational methods, both disciplinary and multidisciplinary, including the exploration of massively parallel and distributed workstation-class computers for affordable computations for the analysis and design of aerospace systems. The emphasis of the work of this peer group is the development of new methods and integration of state-of-the-art methods.	RGEG and EDGEG Part 3
Computer Science and Engineering (CSE) Lead Competency - SEC	Exploitation and application of computer science, communications, information and/or knowledge management and software technologies for the development and deployment of advanced multidisciplinary analysis, design, and testing capabilities for current and future aerospace vehicles and systems.	EDGEG Part 1 and 2
Crew Systems, Aviation Ops, and Mission Critical (CAM) Lead Competency – AirSC	Develop requirements, concepts, assessment methods, and guidelines for flight deck systems and human/automation interfaces and their integration into aircraft flight decks. Develop design, verification, and certification technology for mission critical systems. Conduct analytical and experimental research on highly integrated, failure immune computing systems.	RGEG and EDGEG Part 3
Dynamics and Control (DYC) Lead Competency - AirSC	Develop atmospheric flight dynamics, guidance and control design requirements, algorithms, control laws, modeling methods, analysis tools, and test techniques. Conduct flight dynamics evaluations of aerospace vehicle configurations. Develops advanced control law theories for aerospace applications.	RGEG and EDGEG Part 3
Flight Instrumentation Research (FI) Lead Competency - SEC	Conduct research functions associated with determining the nature, magnitude, and inter-relationships of phenomena and processes to be tested or applied in flight; creating or developing means of investigating these phenomena and processes; and to develop principles, criteria,	RGEG and EDGEG Part 3

	<p>methods, and a body of data of general applicability for use by others.</p> <p>Applies to new and existing flight systems and flight-related ground support systems (both hardware and software), facilities, etc.</p> <p>Includes knowledge associated with real-time embedded systems, flight simulation (both ground based and in-flight), modeling, software development, hardware development, simulator systems, system function requirements engineering, interface definition, real-time networks, and real-time control systems implementation.</p>	
Research Systems (RES) Lead Competency - SEC	Perform engineering functions associated with analysis, requirements and design definition, configuration definition, design integration, and verification as applied to new and existing flight systems and ground systems (both hardware and software), facilities, etc., including knowledge associated with system function requirements engineering, interface definition and control and systems verification.	EDGE Part 1 and 2
Sensors, Instrumentation, and Measurements (SIM) Lead Competency — SMC	Conduct research and/or develop, apply, integrate and assess advanced measurement, sensors, instrumentation, and/or related systems to enable research and technology development in ground facilities and experimental systems.	RGE and EDGE Part 3
Structural Mechanics and Advanced Materials (SMA) Lead Competency - SMC	1) Conduct research and develop, characterize, and optimize advanced materials technologies and apply to the development of advanced aerospace systems to meet structural and performance requirements or 2) conduct research and develop, validate, integrate, and apply analytical and experimental methods to enable development of advanced material and structural concepts and technologies for aerospace systems.	RGE and EDGE Part 3